## **AMENDMENTS TO THE SPECIFICATION**

Replace the Title with the following new Title:

THIN FILM TRANSISTOR WITH A SEMICONDUCTOR LAYER THAT INCLUDES A GELABLE SELF-ORGANIZABLE POLYMER

Replace the abstract with the following new abstract (same text as original abstract but with single paragraph spacing):

A thin film transistor including: an insulating layer; a gate electrode; a semiconductor layer including coalesced structurally ordered polymer aggregates of a self-organizable polymer, wherein the self-organizable polymer is of a type capable of gelling; a source electrode; and a drain electrode, wherein the insulating layer, the gate electrode, the semiconductor layer, the source electrode, and the drain electrode are in any sequence as long as the gate electrode and the semiconductor layer both contact the insulating layer, and the source electrode and the drain electrode both contact the semiconductor layer.

On page 1, before "BACKGROUND OF THE INVENTION," add the following new subtitle and new paragraph:

## STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

This invention was made with United States Government support under Cooperative Agreement No. 70NANBOH3033 awarded by the National Institute of Standards and Technology (NIST). The United States Government has certain rights in the invention.

Replace the first sentence on page 7 with the following amended sentence:

Suitable polythiophenes are disclosed in U.S. Serial No. 10/042,356 (Attorney Docket No. D/A1334) which issued as US Patent 6,621,099, U.S. Serial No. 10/042,358 (Attorney Docket No. D/A1332) which issued as US 6,770,904, and U.S. Serial No. 10/042,342 (Attorney Docket No. D/A1333) which has been published as US Published Application 2003/0160234, the disclosures of which are totally incorporated herein by reference.

Replace Table 1 on page 17 with the following revised Table 1:

| Experiments | Before annealing | | After annealing | |
|---|---|---|---|---|
| | Mobility $(cm^2/V.s)$ | On/off ratio | Mobility $(cm^2/V.s)$ | On/off ratio |
| Comparative Example | 0.013-0.038 | $>10^6$ | 0.05-0.12 | $\sim 10^7$ |
| Example | 0.029-0.045 | $>10^6$ | [[0.076-0.012]] **0.076-0.12** | $\sim 10^7$ |